U.S. Department
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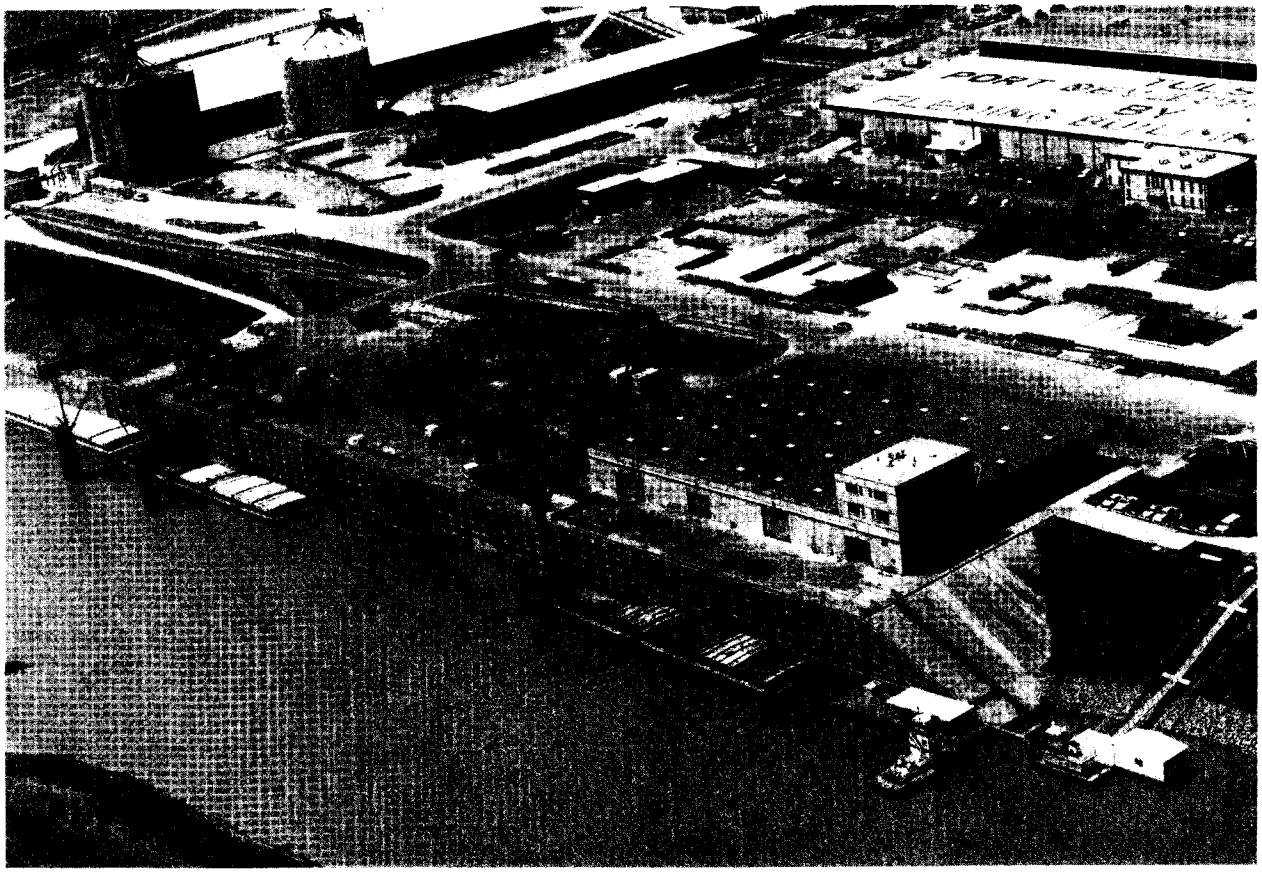
**Maritime
Administration**

United States Shallow Draft Public Port Development Expenditure Report



December 1998

Front Cover Photo Credit: Tulsa Port of Catoosa (OK)

United States
Shallow Draft Public Port
Development Expenditure Report

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U.S. Department of Transportation

Maritime Administration
Office of Ports and Domestic Shipping

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INTRODUCTION

This is a new report on shallow draft inland river public port capital expenditures published by the Maritime Administration (MARAD) in cooperation with industry. The report analyzes investments in shoreside facilities and examines the financing methods used by the shallow draft port industry for 1996, as well as historic data prior to 1996. Other port data, such as type of operation, type of governance, and extent of planning, are also included.

The survey data were obtained for MARAD by two industry associations, the National Waterways Conference (NWC) and the Inland Rivers, Ports & Terminals, Inc. (IRPT). The agency wishes to thank the 58 ports that responded to the survey. These organizations are listed in Appendix A on pages 15-16.

MARAD also publishes annually a companion report on deep draft ports, the *United States Port Development Expenditure Report*, the latest version being October 1998. For further information or to obtain copies of either report, please contact the following MARAD office:

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CAPITAL EXPENDITURES FOR U.S. SHALLOW DRAFT PUBLIC PORT DEVELOPMENT

CAPITAL EXPENDITURES –1996

Summary by River System and Facility Type

In 1996, the U.S. shallow draft public port industry invested a total of $49.9 million in capital improvements to its port facilities. Figures 1 and 2 summarize these expenditures by river system and type of facility, respectively. Broken down by river system, 1996 expenditures were concentrated overwhelmingly in the Lower Mississippi (73 percent), and secondarily in the Ohio (12 percent), Upper Mississippi (6 percent), and Columbia-Snake (6 percent) river systems. Appendix A contains a list of the ports responding to the industry-conducted 1996 capital expenditure survey.

Figure 1. Shallow Draft Port Capital Expenditures By River System - 1996

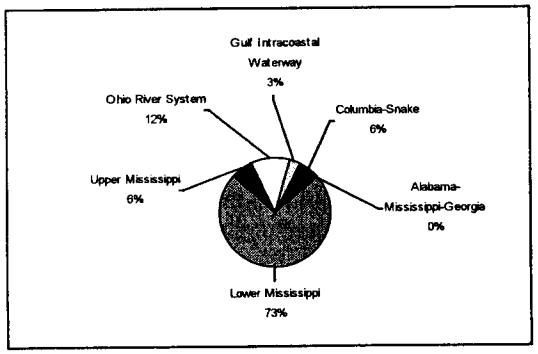
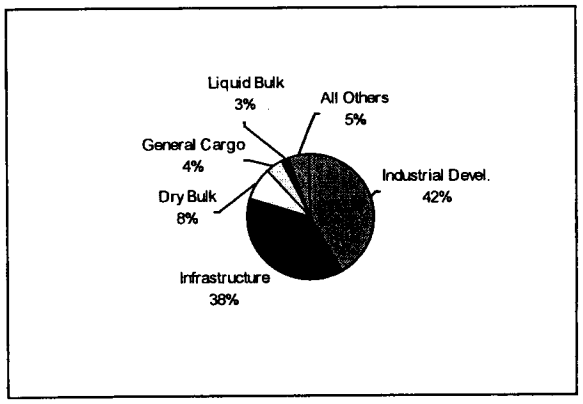


Figure 2 summarizes the break down in 1996 of capital expenditures by type of facility. Industrial development accounted for 42 percent of investments that year, with infrastructure second at 38 percent, and dry bulk a distant third at 8 percent.

It is interesting to note that little was spent on cargo facilities overall (general, specialized, dry, or liquid), which is in contrast to both infrastructure and industrial development.

Figure 2. Shallow Draft Port Capital Expenditures Type of Facility – 1996



Definitions of Terms

- The five cargo categories (including passenger/cruise) cover expenditures for the piers, wharves, handling equipment, and open and closed storage facilities.
- "Specialized/Project Cargo" includes container, RO/RO.
- "Infrastructure" covers expenditures for road, rail, pipeline, and utility (gas, sewer, water, and electricity) improvements, etc.
- "Dredging" includes both improvements and maintenance dredging.
- "Industrial Development" includes industrial parks and water-related or -dependent businesses, among others.
- "Other" includes expenditures for any structure, land, and fixtures not related to cargo movement, such as maintenance or administrative facilities.

- Cargo facilities are for general and specialized/project cargoes and dry and liquid bulk goods.

For the purposes of this report, the river systems are defined below.

Alabama-Mississippi-Georgia River System: Tennessee-Tombigbee Waterway and Warrior, Tombigbee, Coosa-Alabama, Mobile, and Apalachicola-Chattahoochee-Flint Rivers.

Columbia-Snake River System: Columbia, Snake, and Willamette Rivers.

Gulf Intracoastal Waterway (GIWW): A navigation channel approximately 1,340 miles long, running from Brownsville, TX, to St. Marks, FL.

Lower Mississippi River System: Mississippi River south of Cairo, IL, including the Ouachita, Arkansas, Red, Verdigris, White, and Yazoo Rivers, as well as Lake Pontchartrain.

Upper Mississippi River System: Mississippi River north of Cairo, IL, plus Illinois, Missouri, and Kaskaskia Rivers.

Ohio River System: Ohio, Tennessee, Cumberland, Monongahela, Allegheny, Kanawha, and Green Rivers.

New Construction vs. Modernization/Rehabilitation

Tables 1-3 provide the specific expenditure details for 1996. Of the $49.9 million spent in 1996, the overwhelming majority, 92 percent (or $45.7 million) was spent on new construction, leaving just 8 percent ($4.2 million) for facility modernization and rehabilitation. The two largest categories of new construction, comprising over 80 percent of 1996 expenditures were industrial development ($20.3 million at 44 percent) and infrastructure ($18.1 million at 40 percent). As a percentage of 1996 expenditures, the Lower Mississippi River System led all river systems, spending $35.7 million (78 percent), followed by the Ohio River System with $3.8 million (8 percent).

General Conclusions (1996)

- New construction monies for infrastructure and industrial development accounted for 84 percent of monies spent in 1996, while expenditures on cargo facilities accounted for 13 percent.
- Modernization and rehabilitation expenditures showed 49 percent spent on cargo facilities overall and 31 percent on infrastructure and industrial development together.
- Two-thirds of all dredging (69 percent) in 1996 was for modernization and rehabilitation.
- Nearly all infrastructure and industrial development expenditures (95 percent and 98 percent, respectively) were for new construction.
- Seventy-four percent of overall cargo facility expenditures in 1996 was for new construction.
- Passenger and recreational boating facilities experienced little development in 1996 – only 1 percent of total expenditures that year.

Table 1. U.S. Shallow Draft Port Capital Expenditures by Type of Facility -- 1996*
(US$ 000s)

River System	Type of Facility										
	General Cargo	Specialized/ Project Cargo	Dry Bulk	Liquid Bulk	Passenger/ Cruise	Recreational Boating	Infrastructure	Dredging	Industrial Development	Other	Total ($000s)
Alabama-Mississippi-Georgia River System	--	--	$7	--	--	--	--	$49	--	--	$56
Columbia-Snake River System	700	25	--	--	231	313	527	--	800	333	$2,930
Gulf Intracoastal Waterway	496	--	--	337	--	--	819	--	--	--	$1,652
Lower Mississippi**	399	113	2,632	935	--	--	14,361	92	17,587	207	$36,327
Upper Mississippi**	100	60	--	--	--	--	2,094	401	--	567	$3,222
Ohio River System	524	--	1,600	--	10	--	1,166	22	2,338	101	$5,761
Total	$2,219	$198	$4,239	$1,272	$241	$313	$18,968	$564	$20,725	$1,208	$49,948
Percent by Facility Type	4.4%	0.4%	8.5%	2.5%	0.5%	0.6%	38.0%	1.1%	41.5%	2.4%	100.0%

* Excludes $3,700,000 in expenditures that were not broken down by type of construction.

** Dividing line at Cairo, IL.

Tables 2 and 3. U.S. Shallow Draft Port Capital Expenditures -- 1996
New Construction & Modernization/Rehabilitation

River System	New Construction* (US$ 000s)										
	General Cargo	Specialized/ Project Cargo	Dry Bulk	Liquid Bulk	Passenger/ Cruise	Recreational Boating	Infrastructure	Dredging	Industrial Development	Other	Total ($000s)
Alabama-Mississippi-Georgia River System	--	--	--	--	--	--	--	--	--	--	$0
Columbia-Snake River System	700	--	--	--	231	303	503	--	800	333	$2,871
Gulf Intracoastal Waterway	496	--	--	55	--	--	393	--	--	--	$944
Lower Mississippi**	87	113	2,583	935	--	--	14,154	--	17,587	207	$35,667
Upper Mississippi**	12	60	--	--	--	--	2,094	176	--	153	$2,495
Ohio River System	215	--	600	--	10	--	950	--	1,888	97	$3,759
Total	$1,510	$173	$3,183	$990	$241	$303	$18,094	$176	$20,275	$790	$45,736
Percent by Facility Type	3.3%	0.4%	7.0%	2.2%	0.5%	0.7%	39.6%	0.4%	44.3%	1.7%	100.0%

River System	Modernization/Rehabilitation* (US$ 000s)										
	General Cargo	Specialized/ Project Cargo	Dry Bulk	Liquid Bulk	Passenger/ Cruise	Recreational Boating	Infrastructure	Dredging	Industrial Development	Other	Total ($000s)
Alabama-Mississippi-Georgia River System	--	--	$7	--	--	--	--	$49	--	--	$56
Columbia-Snake River System	--	25	--	--	--	10	24	--	--	--	$59
Gulf Intracoastal Waterway	--	--	--	282	--	--	426	--	--	--	$708
Lower Mississippi**	312	--	49	--	--	--	207	92	--	--	$660
Upper Mississippi**	88	--	--	--	--	--	--	225	--	414	$727
Ohio River System	309	--	1,000	--	--	--	216	22	450	4	$2,002
Total	$709	$25	$1,056	$282	$0	$10	$873	$388	$450	$418	$4,212
Percent by Facility Type	16.8%	0.6%	25.1%	6.7%	0.0%	0.2%	20.7%	9.2%	10.7%	9.9%	100.0%

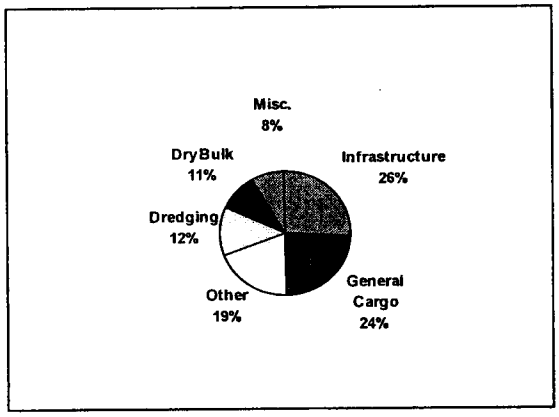
* New Construction: Excludes $1,700,000 in expenditures that were not broken down. Modernization/Rehabilitation: Excludes $2,000,000 in expenditures not broken down.
** Dividing line at Cairo, IL.

CAPITAL EXPENDITURES – PRE-1996 (HISTORIC)

Summary by River System and Facility Type

The historic data (pre-1996) show that $325.4 million in capital expenditures was spent on shallow draft public port facilities.[1] Figures 3 and 4 summarize these expenditures by type of facility and river system, respectively. In contrast to 1996 data discussed earlier, historic data show somewhat different expenditure priorities. A good example of this is industrial development. Pre-1996, only 3 percent was spent on industrial development, compared to 42 percent in 1996.

Figure 3. U.S. Shallow Draft Port Capital Expenditures By Type of Facility – Pre-1996

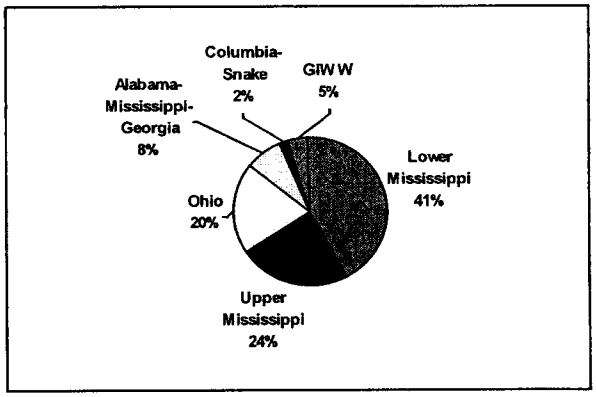


New Construction vs. Modernization/Rehabilitation

Tables 4-6 provide the specific expenditure details for pre-1996.

Of the $325.4 million spent pre-1996, the vast majority was spent on new construction (84 percent), with just 16 percent for facility rehabilitation and modernization. Comprising 92 percent of new construction expenditures were infrastructure (30 percent), general cargo (25 percent), "other" (13 percent), and dredging and dry bulk (12 percent each).

Figure 4. U.S. Shallow Draft Port Capital Expenditures By River System – Pre-1996



General Conclusions (Pre-1996)

- The Alabama-Mississippi-Georgia River System reported no new construction expenses. Expenditures were only for modernization and rehabilitation.
- The other five river systems spent between 66 percent to 95 percent of total pre-1996 expenditures on new construction.
- Similar to 1996 data, expenditures on passenger and recreational boating facilities were a mere 0.4 percent of total expenditures.
- The Lower Mississippi River System had the highest total and new construction expenditures. However, in the rehabilitation and modernization category, the Alabama-Mississippi-Georgia and Upper Mississippi River Systems were the leaders.

[1] Ports reported historical (pre-1996) data over vastly different time periods, ranging from 2 years (1994-1995) to 30 years (1955-1995). In addition, some ports were able to send historical data for only the most recent years. The reader, therefore, should take into account these caveats when analyzing the historical data presented in this report (Figures 3 and 4 and Tables 4-6).

Table 4. U.S. Shallow Draft Port Capital Expenditures by Type of Facility -- Historical (Pre-1996) Costs (US$ 000s)

	Type of Facility										
River System	General Cargo	Specialized/ Project Cargo	Dry Bulk	Liquid Bulk	Passenger/ Cruise	Recreational Boating	Infrastructure	Dredging	Industrial Development	Other	Total ($000s)
Alabama-Mississippi-Georgia River System	$746	--	$329	$50	--	--	--	--	--	$23,841	$24,966
Columbia-Snake River System	--	27	--	120	80	1,167	1,117	153	1,900	1,348	$5,913
Gulf Intracoastal Waterway	7,439	--	67	238	--	--	1,663	4,096	75	1,227	$14,805
Lower Mississippi**	40,837	8,534	12,695	1,922	--	--	31,844	23,597	3,762	13,004	$136,195
Upper Mississippi**	20,312	2,160	19,540	1,616	--	--	10,101	11,655	3,630	8,480	$77,495
Ohio River System	7,176	450	1,800	--	--	--	39,810	934	730	15,101	$66,001
Total	$76,510	$11,171	$34,432	$3,946	$80	$1,167	$84,535	$40,436	$10,097	$63,001	$325,375
Percent by Facility Type	23.5%	3.4%	10.6%	1.2%	0.0%	0.4%	26.0%	12.4%	3.1%	19.4%	100.0%

Note: See footnote 1 on page 7.

* Excludes $8,500,000 in expenditures that were not broken down by type of construction.

** Dividing line at Cairo, IL.

Tables 5 and 6. U.S. Shallow Draft Port Capital Expenditures -- Historic (Pre-1996) Costs

River System	New Construction* (US$ 000s)										
	General Cargo	Specialized/ Project Cargo	Dry Bulk	Liquid Bulk	Passenger/ Cruise	Recreational Boating	Infrastructure	Dredging	Industrial Development	Other	Total ($000s)
Alabama-Mississippi-Georgia River System	--	--	--	--	--	--	--	--	--	--	$0
Columbia-Snake River System	--	--	--	120	80	829	979	153	1,900	1,157	$5,218
Gulf Intracoastal Waterway	6,991	--	--	75	--	--	1,073	1,830	75	--	$10,044
Lower Mississippi**	39,151	8,435	12,628	1,779	--	--	30,687	21,305	3,508	11,885	$129,378
Upper Mississippi**	15,451	2,160	17,369	1,616	--	--	9,023	8,489	3,630	7,408	$65,147
Ohio River System	6,288	--	1,800	--	--	--	39,760	--	30	15,081	$62,959
Total	$67,681	$10,595	$31,798	$3,591	$80	$829	$81,522	$31,778	$9,143	$35,531	$272,746
Percent by Facility Type	24.8%	3.9%	11.7%	1.3%	0.0%	0.3%	29.9%	11.7%	3.4%	13.0%	100.0%

River System	Modernization/Rehabilitation (US$ 000s)										
	General Cargo	Specialized/ Project Cargo	Dry Bulk	Liquid Bulk	Passenger/ Cruise	Recreational Boating	Infrastructure	Dredging	Industrial Development	Other	Total ($000s)
Alabama-Mississippi-Georgia River System	$746	--	$329	$50	--	--	--	--	--	$23,841	$24,966
Columbia-Snake River System	--	27	--	--	--	338	139	--	--	192	$695
Gulf Intracoastal Waterway	448	--	67	163	--	--	590	2,266	--	1,227	$4,760
Lower Mississippi**	1,686	99	67	142	--	--	1,157	2,292	254	1,119	$6,816
Upper Mississippi**	4,861	--	2,171	--	--	--	1,078	3,166	--	1,072	$12,348
Ohio River System	888	450	--	--	--	--	50	934	700	20	$3,043
Total	$8,629	$576	$2,634	$355	$0	$338	$3,014	$8,658	$957	$27,470	$52,628
Percent by Facility Type	16.4%	1.1%	5.0%	0.7%	0.0%	0.6%	5.7%	16.5%	1.8%	52.2%	100.0%

Note: See footnote 1 on page 7.

* New Construction: Excludes $8,500,000 in expenditures not broken down.

** Dividing line at Cairo, IL.

METHODS OF FINANCING CAPITAL EXPENDITURES

The 1996 expenditure survey also included information on the methods used by the U.S. shallow draft public port industry to finance its capital expenditure programs. The survey used the following six funding categories to classify the financing sources: port revenues, general obligation bonds (G.O. bonds), revenue bonds, loans, grants, and other. "Other" includes all financing sources that were not described above, such as state transportation trust funds, state and local appropriations, taxes (property, sales), and lease revenue.

Table 7. Financing Methods Comparison: Pre-1996 & 1996

Financing Method	Pre-1996 Survey*	1996 Survey
Port Revenues	22.9%	20.8%
G.O. Bonds	17.4%	33.8%
Revenue Bonds	9.5%	1.4%
Loans	5.4%	17.7%
Grants	27.5%	18.7%
Other	17.5%	7.7%
Total	100.0%	100.0%
Total Expenditures	$325,375,000	$52,948,000

* Years covered varied from 1955-1995, with the bulk of the data between 1990-1995.

This section describes the financing methods used to fund 1996, as well as pre-1996, expenditures. Table 7 provides a basis for comparing the changes in the primary financing methods used by the shallow draft public port industry. The table highlights the shift in financing methods that occurred between the historic (pre-1996) and 1996 surveys. The significant change was the increase in the use of G.O. bonds and the corresponding decrease in revenue bonds and "other."

The preferred types of funding sources used in Table 8 by the river systems are: general obligation bonds (G.O. bonds), 34 percent; port revenues, 21 percent; grants, 19 percent; and loans, 18 percent. Together these four sources comprised 92 percent of all funding for 1996. Revenue bonds, at 1 percent, were least used.

Funding Sources – 1996

Table 9 summarizes the funding source preferences for each river system in 1996. It shows that all six river systems use port revenues. Grants are used by five of the six river systems.

Table 9. Funding Preferences – 1996 (By River System)

River Systems	Port Revenues	G.O. Bonds	Revenue Bonds	Loans	Grants	Other
Ala.-Miss.-Georgia	1					
Colum.-Snake	1				3	2
GIWW	2	3			1	4
Lower Miss.	3	1	6	2	5	4
Upper Miss.	2			4	1	3
Ohio	2			3	1	

Key: 1 = preferred method.

Table 8. U.S. Shallow Draft Port Capital Expenditures by Type of Financing Method for 1996 (US$ 000s)

River System	Port Revenues		G.O. Bonds		Revenue Bonds		Loans		Grants		Other		TOTAL	
Alabama-Mississippi-Georgia River System	56	1%	0	--	0	--	0	--	0	--	0	--	56	0%
Columbia-Snake River System	1,424	13%	0	--	0	--	0	--	351	4%	456	11%	2,230	4%
Gulf Intracoastal Waterway	332	3%	295	2%	0	--	0	--	970	10%	55	1%	1,652	3%
Lower Mississippi	5,303	48%	17,587	98%	715	100%	6,908	74%	2,550	26%	3,263	80%	36,327	69%
Upper Mississippi	726	7%	0	--	0	--	281	3%	1,929	19%	285	7%	3,222	6%
Ohio River System	3,154	29%	0	--	0	--	2,198	23%	4,108	41%	0	--	9,461	18%
TOTAL	$10,994	100%	$17,883	100%	$715	100%	$9,388	100%	$9,909	100%	$4,059	100%	$52,948	100%
Percent by Funding Source	20.8%		33.8%		1.4%		17.7%		18.7%		7.7%		100.0%	

Of the two largest river systems by expenditures (see Table 8), the Lower Mississippi relied on G.O. bonds (48 percent), loans (19 percent), and port revenues (15 percent) to generate 82 percent of their funding needs. The Ohio River System found that grants (43 percent), port revenues (33 percent), and loans (23 percent) met all their funding needs.

Funding Sources – Pre-1996

Table 10 summarizes the pre-1996 funding preferences for each river system. It shows that all six river systems use port revenues. Grants are used by five of the six river systems.

Table 10. Funding Preferences – Pre-1996 (By River System)

River Systems	Port Revenues	G.O. Bonds	Revenue Bonds	Loans	Grants	Other
Ala.-Miss.-Georgia	1					
Colum.-Snake	2			4	3	1
GIWW	3	4			1	2
Lower Miss.	4	1	5	6	2	3
Upper Miss.	3		2	5	4	1
Ohio	2			3	1	

Key: 1 = preferred method.

The preferred types of funding sources used were (see Table 11): grants (28 percent), port revenues (23 percent), "other" (18 percent), and G.O. bonds (17 percent). Together these four sources comprised 86 percent of all historic funding. Loans, at 5 percent, were least used.

The largest river system by expenditures, the Lower Mississippi, relied on G.O. bonds (40 percent), grants (23 percent), "other" (11 percent), and port revenues (10 percent) to generate 84 percent of their funding needs (see Table 11).

General Conclusions

- Over time, port revenues have been a consistent and important source of funds for the river systems. All six used port revenues as a financing technique in 1996, as well as historically. The second most important funding source is grants, followed by "other."
- The Alabama-Mississippi-Georgia River System used only port revenues to finance its capital expenditures.
- The Lower Mississippi had the most diversified funding sources, using all six financing methods.
- General obligation bonds (G.O. bonds) were almost exclusively (99 percent in 1996) used by the Lower Mississippi River System.

Table 11. U.S. Shallow Draft Port Capital Expenditures by Type of Financing Method – Historical (Pre-1996)

River System	Port Revenues		G.O. Bonds		Revenue Bonds		Loans		Grants		Other		TOTAL	
Alabama-Mississippi-Georgia River System	24,966	33%	0	--	0	--	0	--	0	--	0	--	24,966	8%
Columbia-Snake River System	1,796	2%	0	--	0	--	363	2%	579	1%	3,175	5%	5,913	2%
Gulf Intracoastal Waterway	3,176	4%	435	1%	0	--	0	--	6,909	8%	4,285	7%	14,805	4%
Lower Mississippi	14,361	19%	57,512	99%	12,471	39%	10,782	60%	33,054	36%	16,515	28%	144,695	43%
Upper Mississippi	10,949	14%	0	--	19,120	61%	2,873	16%	10,184	11%	34,370	59%	77,495	23%
Ohio River System	21,069	28%	0	--	0	--	4,000	22%	40,933	45%	0	--	66,001	20%
TOTAL	$76,317	100%	$57,947	100%	$31,591	100%	$18,018	100%	$91,659	100%	$58,345	100%	$333,875	100%
Percent by Funding Source	22.9%		17.4%		9.5%		5.4%		27.5%		17.5%		100.0%	

PROFILES OF SHALLOW DRAFT PORTS

TYPE OF OPERATION

Shallow-draft ports can be categorized by their type of operation: operating, non-operating, and limited-operating. Operating ports in the U.S. generally provide all port services except stevedoring with their own employees including, but not limited to, loading and unloading of barges, rail cars, and trucks and the operation of container terminals, grain elevators, and other bulk terminal operations. Non-operating ports are basically landlord ports, and all of the port facilities are generally leased or preferentially assigned with the lessee or assignee responsible for operating the facilities. Limited-operating ports have facilities leased to others, but continue to operate one or more facilities with port employees.

Table 12 shows shallow draft ports by type of operation.

General Conclusions

- Of the responding ports, most (56 percent) are non-operating entities.
- Half of the river systems (3) showed a decided preference for one type of operation: non-operating. The remaining three river systems either had other preferences (Ohio) or no decided preference at all (Columbia-Snake and Gulf Intracoastal Waterway).

Table 12. U.S. Shallow Draft Ports
Type of Operation – 1996

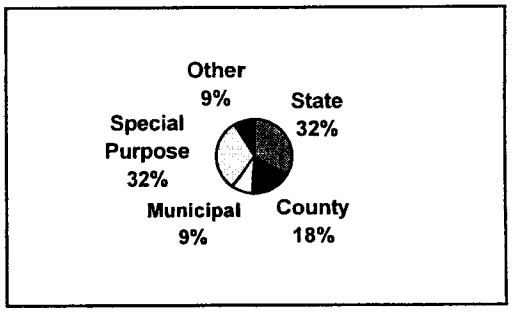
River Systems	Operating	Non-Operating	Limited-Operating	Total Responses
Alabama-Mississippi-Georgia	1	10		11
Columbia-Snake	5	5	2	12
Gulf Intracoastal Waterway		1	1	2
Lower Mississippi	4	8	2	14
Upper Mississippi	1	5	1	7
Ohio	4	2	3	9
Total by Type of Operation	15	31	9	55

TYPE OF GOVERNANCE

U.S. shallow draft public ports generally fall into the following categories: state department, agency, or authority; county department or authority; municipal agency; or special purpose port/navigation district or authority. The classification of ports into these categories is based on their current ownership and status. For the purpose of this report, special purpose port/navigation districts and authorities are separate local government organizations which are generally granted separate taxing authority with some statutory limitations.

Figure 5 summarizes the responses to this survey question, and Table 13 provides the breakdown by river system.

Figure 5. U.S. Shallow Draft Ports
Type of Governance -- 1996



General Conclusions

- The principal types of governance at shallow draft ports are state department, authority, or agency and special purpose port/navigation district or authority, each representing 32 percent of the ports in this survey.
- Two river systems show decided preferences in type of governance. The Alabama-Mississippi-Georgia river ports are exclusively state departments, authorities, or agencies. Eight of 12 ports in the Columbia-Snake River system are special purpose port/navigation districts or authorities. The other four river systems showed no decided preference.

Table 13. U.S. Shallow Draft Ports -- Type of Governance (1996)

River Systems	State Department, Authority, or Agency	County Department, Authority, or Agency	Municipal Agency	Special Purpose Port/Navigation District or Authority	Other*
Alabama-Mississippi-Georgia	11	--	--	--	
Columbia-Snake	--	2	1	8	1
Gulf Intracoastal Waterway	--	--	--	2	
Lower Mississippi	3	4	2	3	3
Upper Mississippi	2	1	1	3	
Ohio	3	3	1	2	1
Total	19	10	5	18	5

* "Other" is defined as either bi-county or a combination of city/county.

EXTENT OF PLANNING

Figure 6 summarizes the survey responses by extent of planning, while Table 14 breaks out the data by river system.

General Conclusions

- The majority of ports and all river systems used some form of planning.
- Of those ports with plans, most used more than one type of plan.
- All ports in the Alabama-Mississippi-Georgia River System had marketing plans.

Figure 6. U.S. Shallow Draft Ports Extent of Planning – 1996

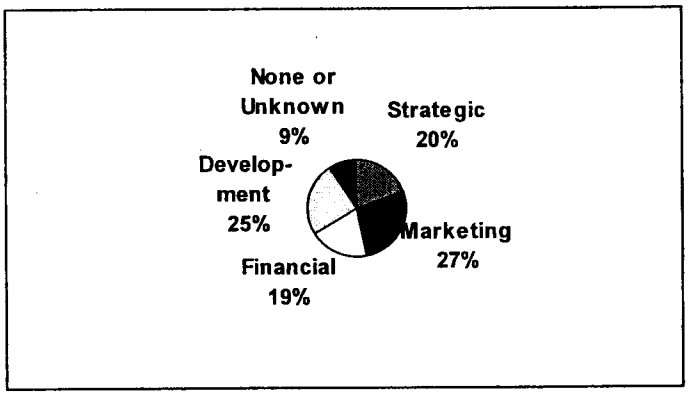


Table 14. U.S. Shallow Draft Ports -- Extent of Planning (1996)

River Systems	Strategic	Marketing	Financial	Development	No Planning Used or Unknown
Alabama-Mississippi-Georgia	2	11	2	2	--
Columbia-Snake	5	3	4	6	4
Gulf Intracoastal Waterway	--	--	--	1	1
Lower Mississippi	6	7	8	11	3
Upper Mississippi	4	4	4	3	2
Ohio	6	6	4	6	1
Total	23	31	22	29	11

APPENDIX A – Capital Expenditure Survey Respondents

	Alabama-Mississippi-Georgia River System (Tennessee-Tombigbee Waterway and Warrior, Tombigbee, Coosa-Alabama, Mobile, and Apalachicola-Chattahoochee-Flint Rivers)
1	**Port of Amory (MS)**
2	**Columbus State Docks (GA)**
3	**Bainbridge State Docks (GA)**
4	**Tuscaloosa/Northport Inland Docks (AL)**
5	**Demopolis Inland Docks (AL)**
6	**Columbia Inland Docks (AL)**
7	**Eufaula Inland Docks (AL)**
8	**Phenix City Inland Docks (AL)**
9	**Cordova Inland Docks (AL)**
10	**Montgomery Inland Docks (AL)**
11	**Claiborne Inland Docks (AL)**
12	**Selma Inland Docks (AL)**
	Columbia-Snake River System (Columbia, Snake, and Willamette Rivers)
1	**Port of Benton (WA)**
2	**Port of Douglas County (WA)**
3	**Port of Hood River (OR)**
4	**Port of Whitman County (WA)**
5	**Port of Columbia (WA)**
6	**Port of Arlington (OR)**
7	**Port of Camas/Washougal (WA)**
8	**Port of St. Helens (OR)**
9	**Port of Pasco (WA)**
10	**Port of Kennewick (WA)**
11	**Port of The Dalles (OR)**
12	**Port of Clarkston (WA)**
	Gulf Intracoastal Waterway (A navigation channel approximately 1,340 miles long, running from Brownsville, TX to St. Marks, FL)
1	**Port of West St. Mary (LA)**
2	**Port of Harlingen (TX)**

(Appendix A continued)

	Lower Mississippi River System *(Mississippi River south of Cairo, IL, including the Ouachita, Arkansas, Red, Verdigris, White, and Yazoo Rivers, as well as Lake Pontchartrain)*
1	**Port Manchac (LA)**
2	**Lake Providence (LA)**
3	**Osceola Port Authority (AR)**
4	**Hickman-Fulton County Riverport Authority (KY)**
5	**Port of Rosedale (MS)**
6	**Port of Greenville (MS)**
7	**Port of Vicksburg (MS)**
8	**Helena/W. Helena Port Authority (AR)**
9	**Port of Shreveport – Bossier (LA)**
10	**Tulsa Port of Catoosa (OK)**
11	**Natchez Adams County Port (MS)**
12	**Port of Memphis (TN)**
13	**Port of Camden (AR)**
14	**Red River Parish Port Commission (LA)**
15	**Port of Yellow Bend (AR)**
	Upper Mississippi River System *(Mississippi River north of Cairo, IL, plus Illinois, Missouri, and Kaskaskia Rivers)*
1	**Kaskaskia Regional Port District (IL)**
2	**Tri-City Regional Port (IL)**
3	**Seneca Regional Port District (IL)**
4	**Southeast Missouri Regional Port Authority (SEMO) (MO)**
5	**Howard/Cooper Counties Regional Port Authority (MO)**
6	**City of St. Louis Port Authority (MO)**
7	**Pemiscot County Port Authority (MO)**
	Ohio River System *(Ohio, Tennessee, Cumberland, Monongahela, Allegheny, Kanawha, and Green Rivers)*
1	**Henderson County Riverport Authority (KY)**
2	**Port of Pittsburgh Commission (PA)**
3	**Florence-Lauderdale County Port Authority (AL)**
4	**Owensboro Riverport Authority (KY)**
5	**Clark Maritime Center (IN)**
6	**Port of Southwind (IN)**
7	**Paducah Riverport (KY)**
8	**Columbiana County Port Authority (OH)**
9	**Lyon County Riverport Authority (KY)**
10	**Bridgeport Inland Docks (AL)**
58	**Total Number of Responding Ports**